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European Biodiesel Board

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149/PRO/10 Brussels, February 26th, 2010

TO: Mr. Hans VAN STEEN, Head of Unit, DG TREN D1
Mr. Paul HODSON, Deputy Head of Unit, DG TREN D1

CC: Ms. Hilkka SUMMA, Head of Unit, DG AGRI H4
Mr. Philip OWEN, Head of Unit, DG CLIM C2
Mr. Didier HERBERT, Head of Unit, DG ENTR Unit B1
Mr. Jesus Barreiro Hurle, Policy Officer, DG ENTR Unit B1
Ms. Inga GARKOVA, Policy Officer, DG TRADE F3
Mr. Peter CZAGA, Policy Officer, DG TRADE C1

RE: Renewable Energy Directive 2009/28 implementation – practical implications of the mass balance system for the biodiesel industry

Dear Sirs,

The ongoing implementation of the Renewable Energy Directive (the RE-D) at European and national level by December 2010 will ultimately lead to the establishment of a fully-fledged legal framework having far-reaching implications for the biodiesel and biofuels industries.

EBB welcomes the Commission engagement towards ambitious biofuels sustainability standards and is dedicated to actively contribute to their definition. At the same time, EBB believes that a key success factor in the RE-D implementation will be to maintain a balance between sustainability concerns and operational imperatives. In other words, the most efficient and fraud-resistant system is primarily a workable system.

The situation should be avoided where extremely stringent sustainability requirements would lead to a disproportionate burden for economic operators, while not bringing corresponding environmental benefits.

Against this background, we would like to once again express our deep concern that an overly restrictive interpretation of the mass balance system could create a major impediment to biodiesel and biofuels marketing within the EU, thereby contradicting the very objective of the RE-D.

More specifically, the interpretation of the term “mixture” contemplated by the Commission would, in practice, call for the setting up of different and segregated supply chain mechanisms. This would *de facto* result in the use of a “track-and trace” system, which is not at all in the spirit of the new Directive (see Annex).

Similarly, we understand that the Commission intends to clarify in its upcoming Communication that the averaging of greenhouse gas figures for different biofuels consignments would not be allowed. If this is confirmed, EBB would like to point out that a biodiesel consignment obtained by mixing different types of vegetable oil or different types of biodiesel, which is common practice in the industry, could end up being allocated many different GHG emission values, calculated in proportion to the different blending components. Transferring this information along the entire supply chain

would be extremely challenging, without increasing at all the environmental performances of the biodiesel.

EBB believes that the proposed mass balance does not constitute a mere clarification, but rather an interpretation of the RED article 18, as demonstrated in the Annex attached to this letter (page 2).

Not only would this interpretation generate additional administrative constraints, but it would also appear as inconsistent with the provisions of the Fuel Quality Directive. Under Directive 2009/30, fuel suppliers will indeed have to report on and gradually reduce the life-cycle greenhouse gas emissions of the fuels they place on the European market. This will be largely achieved by blending biofuels with conventional fuels. It will therefore be necessary to establish a system where a single greenhouse gas value can be attached to one biofuels consignment or to a mix of consignments.

More generally, EBB believes that the compatibility of such an interpretation of the mass balance system (definition of "mixture" based on physical container and non-aggregation of greenhouse gas values) with the overall WTO principles is at least questionable (see Annex).

On a separate issue, but with the same objective of operationalising the provisions of the RE-D, we would like to refer to our letter dated December 17th 2009 (ref. 1398/PRO/09) regarding the implementation of the "grandfathering" clause (Article 17-2), on which we did not receive an answer yet.

In the view of EBB, it is essential that a clear-cut, unambiguous and objective definition of the terms "in operation" in Article 17-2 is given by the Commission in its future Communication, in order to ensure sufficient predictability and legal certainty for biofuels producers. At the same time, the application of this clause should not been made artificially restrictive. With this in mind, EBB believes that the applicability of the grandfathering clause should be based on a combination of two criteria:

- realization of the biofuels investment is made irreversible by the granting of the constructing permit by the competent national authorities;
- effective start of the biofuels production at the said facility in a reasonable timeframe linked to the RE-D entry into force.

EBB would appreciate receiving clarification as to how the terms "in operation" will have to be interpreted for the purpose of the RE-D implementation, as already requested in December 2009.

We thank you in advance for considering our letter and remain at you disposal for any clarification you may need.

Yours faithfully,

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Annex: Physical Mass Balance, Legal Reasoning and Practical Implementation

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150/PRO/10

PHYSICAL MASS BALANCE
LEGAL REASONING AND PRACTICAL IMPLEMENTATION

According to established definitions, mass balance is a process tracking system under which the mass of the outflowing materials is compared to the mass of inflowing materials to derive assumptions, based on the principle that matter can neither be created nor destroyed. Comparing what comes into a system and what comes out can be used to measure how efficient a conversion process is or how much matter has left the system. In the case of biofuels, mass balance is used to control how much sustainable biofuels can be claimed for a given input into the production process, with a view to make the system more fraud-proof.

The term "mixture" – a weak legal basis for an imperfect system

The Commission reasoning concerning mass balance is based on a definition of the term "mixture" restricting mass balance to the container scale, on the ground that article 18 requires to describe the sustainability characteristics of the consignments "added to the mixture".

"Mixture" is not defined in the RED article 2 and there are no established legal definitions for this term. However, a sensible analysis of the term might lead to consider that there is a mixture as soon as consignments are mixed. Such an interpretation leads to a situation where mass balance should be performed each time consignments are physically mixed, while no mass balance should be carried out when only one consignment is used.

If such a definition were to be applied to the current trade and industry practices, mass balance should be performed for each transfer of the consignments from one container to another. Due to the many transfers carried out between the cultivation of the biomass and the delivery of the biofuel, the administrative burden resulting from a mass balance performed for each mixture of consignments would result in a very significant burden on the industry. As the ultimate purpose of the traded commodities cannot be known by the upstream economic operators, a physical mass balance would imply keeping such records for virtually all traded commodities.

As already expressed in the EBB Position on mass balance, the chain of custody and verification in the Renewable Energy Directive 2009/28/EC (EBB document 1296/PRO/09) sent to DG TREN last November 20th, 2009, physical mass balance would prevent putting together product stocked in different tanks on one single site, while allowing distant storage tanks connected by a pipeline as one container, which would only make logistics more complex and costly without making it less fraud-proof.

No requirement for sustainability characteristics preservation for each consignment

Moreover, article 18 1) c) only requires that the sum of all output has the same sustainability characteristics, in the same quantities, as the sum of all input. This requirement cannot be interpreted as a way to extend the greenhouse gas value of the component with the highest greenhouse gas value to the final mixture, because the weighting of the sustainability characteristics has to be maintained. In addition, the necessary conservation between input and

output, which is the fundament of the mass balance, is clearly set between two the final sum of consignments and the initial sum of consignments, which are aggregated figures. The sum of output products has to match the sum of input materials. However, this requirement cannot be strictly interpreted as the legal basis for a system where the sustainability characteristics of each consignment must strictly remained attached to it.

The EU legislator had the opportunity to express his choice for a system where the sustainability characteristics of each consignment are maintained all along the chain of custody with a clear and unambiguous formulation. The legislator could have made this choice, but he did not. Indeed, you would need the following modified article 18 1) c) to unambiguously conclude that the sustainability characteristics of each consignment have to be preserved:

(c) *provides for **~~the sum of all~~** consignments withdrawn from the mixture to be described as having the same sustainability characteristics, **~~in the same quantities~~**, as the **~~sum of all~~** consignments added to the mixture.*

Based on these facts, it appears that deriving the need to preserve the sustainability characteristics of each consignment from the current article 18 1) c) requires an interpretation and not a mere application of the legal provisions. **The definition of mass balance suggested by the Commission is based on one specific interpretation of the Renewable Energy Directive.**

Interpretation of the RED concerning verification

EBB regards the rejection of the greenhouse gas aggregation implicitly allowed by article 18 1) c) and the definition of a physical mass balance as a fully-fledged interpretation, as opposed to a mere clarification exercise.

Any interpretation should first and foremost be intended to fulfil the spirit of the Renewable Energy Directive. According to the Renewable Energy Directive recital 76, the compliance of biofuels with the sustainability requirements has to be controlled using mass balance, a method which:

"…should maintain the integrity of the system while at the same time avoiding the imposition of an unreasonable burden on industry. Other verification methods should, however, be reviewed."

In the EBB view, the presently proposed interpretation of mass balance goes against the spirit of the Renewable Energy Directive expressed in recital 76, as physical mass balance would put an unreasonable burden on the industry without improving the integrity of the system.

When it comes to the other methods to be reviewed by the European Commission, the article 18 2) provides that:

"In its assessment, the Commission shall consider those verification methods in which information about sustainability characteristics need not remain physically assigned to particular consignments or mixtures. The assessment shall take into account the need to maintain the integrity and effectiveness of the verification system while avoiding the imposition of an unreasonable burden on industry."

The review should also respect the double objective of system efficiency and a reasonable burden placed on the industry, which further indicates that these aspects are the spirit of the Renewable Energy Directive. Article 18 2) clearly shows a trend towards systems more flexible than mass balance, as opposed to the more restrictive approach adopted by the European Commission. In this context, the current interpretation of the Commission appears to diverge from the spirit of the upcoming review.µ

An unreasonable burden not improving the system integrity and efficiency

Applying the mass balance defined by the Commission would require keeping records of each single mixing operation.

An attempt to account for all mixing operations along the chain of custody would give the following results:

1. oilseeds are harvested
2. oilseeds are stored in a silo by the farmer
3. oilseeds are transported by lorry to a broader grain trader
4. oilseeds are transferred into another storage tank by the grain trader
5. oilseeds are loaded on a barge towards a crushing company dispatching point
6. oilseeds are loaded on a train towards one of the crushing facilities
7. oilseeds are unloaded into a silo at the crushing facility
8. oilseeds are brought to a production line to be washed
9. oilseeds are brought to a crushing line
10. vegetable oil is refined
11. vegetable oil is stored into a tank
12. vegetable oil is loaded on a train
13. vegetable oil is unloaded at a trader's facility into a tank
14. vegetable oil is loaded on a truck towards a biodiesel processing facility
15. vegetable oil is unloaded into a tank
16. vegetable oil is brought into a production line for de-acidification
17. vegetable oil is brought into a production line for esterification
18. vegetable oil is brought into a production line for transesterification
19. biodiesel is distilled
20. biodiesel is stored in a tank
21. biodiesel is loaded on a truck towards a fuel suppliers facility
22. biodiesel is unloaded at a fuel suppliers facility
23. biodiesel is blended with fossil fuel
24. biodiesel blend is loaded on a truck towards a regional storage facility
25. biodiesel blend is unloaded into a tank at the regional storage facility
26. biodiesel blend is loaded on a truck towards a tank station
27. biodiesel blend is unloaded into a tank at tank station

A "mixture" is likely to take place at each of these 27 steps in the chain of custody, because the consignment is likely to be stored in a container containing at least one similar consignment. Practices differ between market players. The list above is an average scenario, including both operations more complex than usual and some less complex than usual.

The storage tanks of fuel suppliers can contain a large quantity of fuels where biodiesel is blended. It is current practice to produce biodiesel from a blend of vegetable oils and it is simply unavoidable to allow highly sustainable biofuels from animal fats or used cooking oils to meet the specifications of EN14214. Some of our members have recorded more than 8 different origins for the oilseeds in their silos. The following table shows the sustainability characteristics corresponding to different products:

Oilseeds origin	Similar vegetable oils in the mixture	Similar biodiesel in the mixture	Sustainability characteristics
4	2	3	**24**
5	3	6	**75**
8	3	10	**240 !!**

The cost associated with accounting for all these mixing operations cannot be described as a reasonable burden placed on the industry, especially considering that all facilities potentially producing for biodiesel production might have to adapt. As a result, many economic operators will elect to build a separate logistics chain. A separate logistics chain is the result supposed to be achieved by the verification method called track and trace or even product segregation, not by mass balance.

Regarding the integrity of the system, the lack of a time period for mass balance indirectly allows a nearly unlimited freedom to claim the sustainability characteristics of consignments formerly added to the mixture, because tanks are never emptied out in normal operations. This does not contribute to strengthening the integrity of the system, rather the opposite. This could be the reason for which a time period was set under the RTFO system and in the ISCC sustainability scheme.

Physical mass balance also implies that storage tanks located on a same site and not connected would require two separate mass balances, while distant tanks connected by a 300km pipeline would be considered as one tank. This would simply introduce imbalance between one type of infrastructure and another and possibly allow an important flexibility for claiming sustainability characteristics of materials added to the mixture.

According to the WTO Agreement on Technical Barriers to Trade article 2.2, "*Members shall ensure that technical regulations are not prepared, adopted or applied with a view to or with the effect of creating unnecessary obstacles to international trade*", which is further specified in the same article as the need for "*technical regulations shall not be more trade-restrictive than necessary to fulfil a legitimate objective*". This puts the physical mass balance at risk of being challenged on the basis of the WTO Agreement on Technical Barriers to Trade by one of the international players on the globally integrated markets involved in biodiesel production. This undermines the legal certainty of the legal framework.

The nature of the timely and spatial flexibilities created by the physical mass balance is specifically an issue for the system integrity. In conclusion, such flexibilities are not contributing to decreasing the burden placed on economic operators and they are leaving loopholes that some economic operators will be tempted to use. In addition, the legal certainty of the legal framework is questionable. This is why EBB considers that physical mass balance does neither improve the system integrity, nor its efficiency.

Improving the system integrity and efficiency through a reasonable burden on industry

Mass balance is intended to compare the mass of products flowing in and out of a system. The RED includes the specific requirement for mass balance at the scale of the mixture. Since the Commission showed willingness to interpret article 18, it would be sensible to interpret it according to the spirit of the Directive: "*maintain the integrity and effectiveness of the verification system while avoiding the imposition of an unreasonable burden on industry."*

The requirement to carry out mass balance at "mixture" level is unambiguous. However, it remains to clarify for which mixtures a mass balance would have to be carried out. Applying physical mass balance to each mixture would not be in line with the spirit of the Directive.

This would ensure that the claims for sustainability characteristics match the quantity of input product. EBB understands that mass balance is intended to verify the accuracy of sustainability claims, which is why the control should be applied to the economic operators likely to issue claims. Therefore, EBB would suggest carrying out a non-systematic physical mass balance only where conversion operations take place, e.g. harvesting, crushing, esterification and transesterification.
In addition, other economic operators than these involved in conversion operations would simply be forbidden to modify the claim from the precedent step involved in conversion. A time period and spatial scope would close the potential loopholes existing in physical mass balance.